

their esters, their anhydrides and their metal salts is an ethylene polymer functionalized by maleic anhydride.

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4. (Amended) Compositions according to Claim 3, wherein the maleic anhydride is present in the functionalized ethylene polymer in an amount of 0.001 to 5% by weight.

5. (Amended) Compositions according to Claim 3, wherein the ethylene polymer functionalized by maleic anhydride exhibits a standard density of 915 to 960 kg/m³ and a melt flow index, measured at 190°C under a load of 5 kg, of 0.1 to 50 dg/min.

6. (Amended) Compositions according to Claim 1, wherein the composition is diluted in one or more nonfunctionalized olefin polymers.

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8. (Amended) Process for the preparation of stabilized compositions comprising one or more functionalized olefin polymers and one or more stabilizing agents, wherein one or more olefin polymers, one or more functionalization agents, one or more radical initiators, one or more stabilizing agents comprising one or more sterically hindered phenol groups and at most one ester functional group from which at least one of the stabilizing agents is 1,3,5-trimethyl-2,4,6-tris(3,5-di-t-butyl-4-hydroxybenzyl)benzene, and optionally one or more additives, are melt blended in a screw extruder.

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9. (Amended) Process according to Claim 8, wherein at least one of the olefin polymers introduced into the extruder is an ethylene polymer exhibiting a standard density of 915 to 960 kg/m³ and a melt flow index, measured at 190°C under a load of 5 kg, of 0.1 to 200 dg/min.

10. (Amended) Process according to Claim 8, wherein at least one of the functionalization agents introduced into the extruder is maleic anhydride.

11. (Amended) Process according to Claim 8, wherein the processing temperature lies between 120°C and 290°C.

12. (Amended) Process according to Claim 8, wherein the stabilized composition is diluted in one or more nonfunctionalized olefin polymers.

13. (Amended) Use of compositions according to Claim 1 for compatibilizing olefin polymers with polymers, fillers and metal substrates which are incompatible with olefin polymers, wherein said compositions are obtained by a process comprising one or more functionalized olefin polymers and one or more stabilizing agents, wherein one or more olefin polymers, one or more functionalization agents, one or more radical initiators, one or more stabilizing agents comprising one or more sterically hindered phenol groups and at most one ester functional group from which at least one of the stabilizing agents is 1,3,5-trimethyl-2,4,6-tris(3,5-di-t-butyl-4-hydroxybenzyl)benzene, and optionally one or more additives, are melt blended in a screw extruder.

14. (Amended) Use according to Claim 13, wherein the incompatible polymers are epoxy resins.

15. (Amended) Use according to Claim 13 in multilayer adhesion.

16. (Amended) Use according to Claim 13 in the multilayer coating of steel pipes.